



## Selenium Training

### Training Topics

#### Chapter 1 : Introduction to Automation Testing

- What is automation testing?
- When Automation Testing is needed?
- When Automation Testing is not needed?
- What is the use of automation testing?
- Different Automation Tools available in the Market.
- What is the difference between Selenium and QTP?

#### Chapter 2 : Introduction to Selenium

- What is Selenium?
- Advantages of Selenium

#### Chapter 3 : Components in Selenium

- Selenium IDE
- Selenium-RC
- Selenium-Grid
- Selenium Web Driver/Selenium 3.0

#### Chapter 4 : Selenium IDE

- Installing Selenium IDE
- Selenium IDE icons
- Recording your first test with Selenium IDE
- IDE Context Menu
- Assert
- Verify
- Adding Selenium IDE comments



- Synchronization commands
- Working on pages with AJAX
- Storing elements
- Creating test suites
- Tools to identify elements/objects
- Firebug
- IE Developer tools
- Locating elements by ID
- Finding elements by name
- Finding elements by link text
- Finding elements by XPath
- Finding Elements by using CSS
- Summary
- Some Special IDE commands
- Write your own Selenium IDE script without record and playback

## Chapter 5 : Basics of Java – Introduction Of Java

- Java Installation
- Introduction to all predefined packages
- More about JVM,JRE&JDK
- Types of Variables
- Data Types in Java

## Chapter 6 : Object Oriented Programming Concepts

- Introduction to OOPS
- Class
- Object
- Local, Instance and static variables
- Constructors
- Methods
- Arrays



- This keyword
- Final Keyword
- Encapsulation
- Inheritance and Types
- Working with super classes and subclasses
- Super Keyword
- Using types of polymorphism such as overloading, overriding, and dynamic binding
- Abstraction
- Encapsulation
- Abstract classes
- Interfaces
- String Methods
- Collections
- Exception Handling

## Chapter 7 : I/O Streams

- I/O using Java
- Files (Create/Read/Write operations on files)
- Reading data from Property files using java program
- Reading and Writing data from/to Excel files using Apache POI API and JXL API

## Chapter 8 : Selenium Web Driver

- Selenium Architecture
- Downloading web driver Jars configuring in eclipse
- Architecture of selenium web driver
- Drivers for Firefox, IE, Chrome, iPhone, Android etc
- What is the difference between Selenium RC and WD?
- Installing and Configuring Eclipse for Web Driver



## Chapter 9 : Exploring Web Driver

- Edit box
- Link
- Button
- Checkbox
- Radio Button
- Drop Down Box
- Select value
- Display all values
- Select values step by step
- Capture screenshots
- Synchronization Commands In Web Driver
- Implicit wait
- Explicit wait
- Web Driver wait
- File uploads and File downloads
- Handling alerts
- Handling confirmation messages
- Keyboard actions
- Mouse actions
- Handling I frames
- Handling multiple tabs
- Handling popups
- Preparing web driver test cases using customized x-path
- Handling WebTables
- Data Driven using Excel, Property File & XML
- Logging using Log4j



## Chapter 10 : Selenium GRID

- Establish Hub & Node
- Integrating WebDriver & GRID

## Chapter 11 : Framework

- What is a Framework
- Types of Frameworks
- What is modular framework
- What is data driven framework
- What is keyword driven framework
- What is hybrid framework
- POM Framework
- Advantages of POM
- Implementing Project using POM Framework
- Use of framework
- Explaining about your framework
- How to develop a framework
- Integration of the framework
- How to execute scripts from framework

## Chapter 12 : TestNG Framework

- How to Install TestNG plug-in in Eclipse?
- TestNG Annotations
- TestNG sample script
- Writing Selenium testing script from scratch
- Creating Test suites using TestNG
- Reports generation using TestNG



- Parameterized test cases using TestNG framework
- Preparing TestNG Parallel Suite
- Running test multiple times, depends on Methods, Grouping

## Chapter 13: Reporting

- Installing Extent Report Plugin in Eclipse
- Methods in Extent Report
- Extent Report Implementation

## Chapter 14 : Build Tools

- Maven/ANT/SVN
- Implementing TestNG using Maven/ANT/SVN

## Chapter 15 : CI Tools

- Introduction to Jenkins

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